

INTERNATIONAL SEARCH REPORT

International Application No
PCT/IB2004/002877

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 E21B47/10

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 E21B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 3 709 032 A (COLES R ET AL) 9 January 1973 (1973-01-09) column 5, lines 19-52; claims 1-5	1,3-6, 8-12
Y	US 6 305 216 B1 (SAMAROO BRIAN H) 23 October 2001 (2001-10-23) column 4, lines 45-63 - column 6, lines 9-26	1,3-6, 8-12,27
X	claims 1,17	18,20
Y	US 6 618 677 B1 (BROWN GEORGE ALBERT) 9 September 2003 (2003-09-09) claims 1,2	27
A	US 2 739 475 A (NOWAK THEODORE J) 27 March 1956 (1956-03-27) column 2, lines 54-63 - column 4, lines 10-47	13,16,17
	----- -/-	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *G* document member of the same patent family

Date of the actual completion of the international search

14 December 2004

Date of mailing of the international search report

27/12/2004

Name and mailing address of the ISA
European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax (+31-70) 340-3016

Authorized officer

Manolache, I

INTERNATIONAL SEARCH REPORT

Int nal Application No
PCT/IB2004/002877

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>US 3 480 079 A (WRIGHT WILLIAM SHERWOOD ET AL) 25 November 1969 (1969-11-25) column 7, lines 1-19</p> <p>-----</p>	1

INTERNATIONAL SEARCH REPORT

Int. Application No
PCT/IB2004/002877

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 3709032	A	09-01-1973	NONE	
US 6305216	B1	23-10-2001	AU 2072401 A CA 2392618 A1 EP 1240495 A1 NO 20023024 A WO 0146673 A1	03-07-2001 28-06-2001 18-09-2002 21-06-2002 28-06-2001
US 6618677	B1	09-09-2003	AT 250212 T AU 5833900 A BR 0012337 A CA 2378564 A1 DE 60005357 D1 DK 1196743 T3 EA 3769 B1 EP 1196743 A1 WO 0104581 A1 NO 20020078 A US 2004006429 A1	15-10-2003 30-01-2001 19-03-2002 18-01-2001 23-10-2003 22-12-2003 28-08-2003 17-04-2002 18-01-2001 07-03-2002 08-01-2004
US 2739475	A	27-03-1956	NONE	
US 3480079	A	25-11-1969	NONE	